

CLAIMS

1. An intervertebral support for restoring and maintaining an anatomical intervertebral spacing and for restoring three-dimensional mobility where the support is installed, 5 the support comprising a spacer and retaining means, and being characterized in that it is constituted by an anterior zone (1) suitable for being positioned between the laminae of the vertebrae (L), having the function of restoring an anatomical intervertebral spacing, and a 10 posterior zone (2) comprising retaining means having the function of preventing the support from migrating towards the anterior portion of the spine by pressing against the laminae.
- 15 2. A support according to claim 1, characterized in that the retaining means of the posterior zone (2) are lateral shoulders (13) set back from the anterior zone (1) and suitable for being received against the laminae of the vertebrae as close as possible to the articular facets.
- 20 3. A support according to claim 1, characterized in that the retaining means of the posterior zone (2) are constituted by two transverse projections (8).
- 25 4. A support according to claim 1, characterized in that the anterior zone (1) is provided with grooves (3a, 3b).
- 30 5. A support according to claim 1, characterized in that the lateral shoulders are of small area being of the type having symmetrically-opposite projecting bulges (3) set back from the anterior zone (1) and suitable for releasing movement of the vertebral articular facets.
- 35 6. A support according to claims 4 and 5, characterized in that the lateral shoulders (3, 13) present height that does not exceed the height of the posterior zone (2) of the support, and are narrow in width.

7. A support according to any preceding claim, characterized in that the posterior zone (2) serves to damp movements between two adjacent vertebrae.

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8. A support according to any preceding claim, characterized in that the posterior zone (2) comprises a bottom face (5) bearing on the top portion of the process (E) at the bottom of the region fitted with the implant.

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9. A support according to any preceding claim, characterized in that the posterior zone (2) is prismatic in shape and of a height that corresponds to the spacing between the adjacent vertebrae, presenting at least one rounded corner, the top face (4) of the posterior zone (2) being triangular in shape, so as to receive the junction point (J) formed by the lamina (L) and the processes (E).

10. A support according to any one of claims 1 to 8, characterized in that the tapering shape of the posterior zone (2) allows freedom of movement between the top face of the spacer and the process (E) above the region fitted with the implant.

25 11. A support according to any preceding claim, characterized in that the posterior zone (2) presents a top surface (4) and a bottom surface (5) that are flared to the anterior end of the spacer, tapering progressively towards the posterior ends of said surfaces (4 and 5), and 30 receiving the junction point (J) formed by the lamina (L) and the process (E).

12. A support according to any preceding claim, characterized in that the core of the posterior portion (2) 35 is pierced by a through recess (15), enabling the flexibility of the implant to be increased.

13. A support according to any one of claims 1 to 11, characterized in that the core of the posterior portion (2) carries teeth (16) spaced apart by furrows (17), and opposed to each other in pairs on the bottom and top faces (5 and 4), enabling the flexibility of the assembly to be varied.

14. A support according to any preceding claim, characterized in that the vertical portions of the lateral shoulders (3, 13) in contact with the laminae present respective concave zones (7) extending and tapering towards the posterior lateral zone.

15. A support according to any preceding claim, characterized in that at least the posterior zone is made of silicone having hardness lying in the range 40 to 80 on the Shore A scale, allowing freedom of movement in the region fitted with the implant, and flexibility in order to relieve lordosis.

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16. A support according to any preceding claim, characterized in that a biocompatible knit fabric covers at least part of the posterior zone (2) of the support.

25 17. A support according to any preceding claim, characterized in that the anterior portion of the support (1) has a loop (12) of rigid biocompatible material in its center.

30 18. A support according to any preceding claim, characterized in that the anterior portion (1) of the support is constituted entirely out of rigid biocompatible material.

35 19. A support according to any preceding claim, characterized in that it includes additional retention means constituted by ligaments (9a, 9b) crossing in the

center of the implant, and holes (11) extending vertically for passing the ligaments.

20. A support according to any one of claims 1 to 18,
5 characterized in that it includes additional retaining means constituted by independent ligaments passing through the full height of the support.

21. A support according to any preceding claim,
10 characterized in that the top face (4) of the posterior zone (2) presents a shallow groove (14) extending lengthwise in its middle and suitable for coming into contact with the process above the region fitted with the implant.